This article, published by the Houston Chronicle in October, 2023, describes the work of Texas Health and Environment Alliance's (THEA) San Jacinto Coalition to ensure that the threat from the San Jacinto River Waste Pits Superfund Site is completely removed and the community is protected.



Cleanup of San Jacinto waste pits in stalemate

Firms responsible, feds in tug-of-war

By Rebekah F. Ward STAFF WRITER



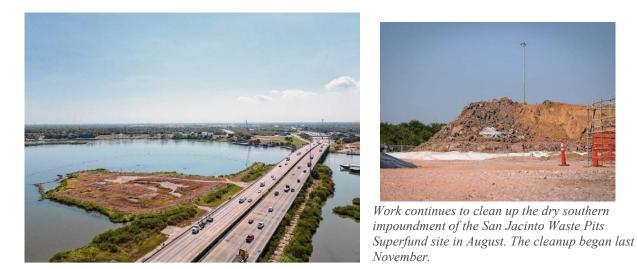
Photos by Jon Shapley/Staff photographer

Greg Moss says he didn't find out about the San Jacinto River waste pits' toxicity until he watched some television news reports in 2011, despite living and working nearby for most of his life.

Greg Moss' workshop in Channelview is filled with tangles of boat motor parts, salvaged metal and weathered slices of history: old beer ads and auto show banners, signs about a Superfund site on the nearby San Jacinto River.

The signs are among the most personal memorabilia the snowy-haired repairman keeps piled in his musty, loft-ceiling garage, tagged by a human-height watermark from Hurricane Harvey.

"When you see kids in your neighborhood that you've known since they were little kids dying because of some pollution that's in the water, that some big company dumped and abandoned, that's bad, you know?" Moss said. "And every time my property floods, it gets full of that stuff, gets overrun with the water."



McGinnes Industrial and International Paper have asked for extensions totaling nearly two years on the toxic pit north of Interstate 10, arguing with the EPA over how to handle the partially submerged waste.

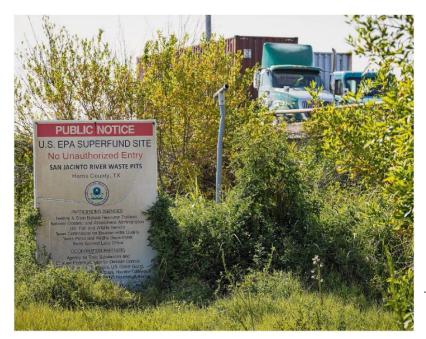
The toxic San Jacinto River waste pits are a pair of impoundments built at the river's edge a couple blocks from Moss' garage in the mid-1960s to dump hazardous waste from a nearby paper mill. These pits — which scientists say contain levels of dioxins and furans that are highly dangerous for humans — are partially submerged in the ever-shifting river. A 2015 assessment by state officials found elevated rates of cancers affecting the liver, kidney, brain and eyes in areas that border the site.

The toxins, byproducts of pulp bleaching and other industrial processes, build up in the fatty tissue of both fish and humans. At high levels such as those present in the pits, they can cause cancers as well as hormone changes, liver damage, skin diseases, reproductive issues and immune suppression, according to the U.S. Environmental Protection Agency and the Centers for Disease Control and Prevention.

Contractors have removed more than two-thirds of the toxic material at the onshore pit south of the Interstate 10 bridge since November 2022. But the responsible companies and federal officials are locked in a tug-of-war over the northern pit, much of which is now underwater.

The dry, southern pit was the easy part. The fight over the flooded northern pit is reopening old wounds.

International Paper Co. inherited responsibility for the southern pit in 2000, after acquiring the business that had dumped its hazardous waste there. It shares responsibility for the northern pit with McGinnes Industrial Maintenance Corp., a subsidiary of Houston-headquartered refuse giant Waste Management, which operates nearly a third of all landfill volume in the country.



Trucks on I-10 drive past the northern part of the San Jacinto Waste Pits Superfund site, a former paper mill dumping site.

The federal government added both pits to the National Priorities List for hazardous waste cleanup in 2008, decades after they were created. Despite living and working nearby for most of his life, Moss did not find out about their toxicity until he was watching television in 2011. The county and state had sued the companies for violating environmental laws over their management of the toxic waste, and it was all over the news.

"That's kind of unnerving, when it's something that you work on. When you have water, and all of the sediments out of those engines all over you for 40 years, and all of a sudden they tell you the water out there is toxic," Moss said.

Shifting sediment

Until 2011, most residents had no idea the verdant peninsula was anything more than a nice place to picnic.

"The northern pit wasn't fenced off, it wasn't anything," Moss said. "When we were younger, back in the '80s or '90s, we used to ride our ATVs out there. There was no forewarning that there was anything out there hazardous at all."

Moss said that even in the dozen years since he and many neighbors got vocal about the sites, others still sit their fishing boats right by the buoys that rim the northern pit, eating what they catch.

This year, the waste pit to the south of I-10 saw a swell of activity: excavators dug and hauled off contaminated soil at the river-edge property, replacing it with fresh earth. Water at the site was gathered and treated in a set of massive, lined open-air storage tanks. In the 10 months since

beginning work, the EPA reported workers hauled off about 6,609 truckloads of contaminated material, or 92,526 cubic yards, and are now more than 72% finished with the excavation.

Across the I-10 bridge, the partially-submerged northern waste pit has been comparatively quiet. McGinnes Industrial and International Paper have asked for extensions totaling nearly two years on the northern site, arguing with the EPA over how to handle the waste.

The companies paid to install a cap over the waste at the bottom of the flooded pit in 2011. They have argued that the best solution is to leave at least some of the waste in the pit and replace the temporary cap with a permanent one. The EPA, however, signed off on an order opting for full removal in 2017.

When the companies agreed in 2018 to kick off plans to fully excavate a then-estimated 212,000 cubic yards of dioxin-contaminated material from both pits, Scott Pruitt, then the agency's administrator, promised that the "EPA will ensure that the remedial design removes all the contamination as quickly and safely as possible and permanently protects the health and safety of the surrounding communities."

Those communities have often been directly in the toxins' paths. A flood risk assessment of the site conducted by Texas A&M at Galveston in 2014 established that "when taken together hurricane frequency, storm surge, sea level rise and subsidence make the low-lying San Jacinto waste pits extremely vulnerable to inundation and erosive events."

A 2019 review by the federal Government Accountability Office said concerns over the site's flooding potential were increasing. It noted EPA sampling at the site after Hurricane Harvey showed dioxin concentration above 70,000 nano-grams per kilogram, eclipsing the site's risk-based cleanup level of 30 nanograms per kilogram. The hurricane hit six years after the temporary cap was placed over the northern pit.

Impasse over solutions

Despite the risks, Pruitt's promise of quick, permanent removal has so far proved hard to keep, as the companies have called into question the viability of fully removing the contamination at each step.

In a Sept. 8 letter reviewed by the Chronicle, EPA officials called off a plan they put in motion in December to try to break the stalemate with an independent design review. The letter cites repeated attempts by the companies to use the review process to "re-open or reevaluate" the 2017 decision that the waste should be removed and says the companies mischaracterized agency efforts to get third-party experts to help solve any technical uncertainties getting in the way.

The companies and their contractor, global engineering firm GHD, say they are worried about something called hydraulic heave. Since the contaminated soil is partially submerged in the river and would have to be walled off and dried out before cleanup, contractors need to make sure water and sediment do not loosen under the structure and surge up underneath the dry walls to refill the area during excavation or spill contaminants into the river.

A 2021 letter from GHD to federal officials says its concerns are great enough for it to recommend non-excavation options, including a more permanent cap that would leave contaminants underwater, which the companies reiterated in their remedial design proposal last year. A re-examination of the data determined the waste "extends to much deeper depths than was assumed by the EPA," GHD wrote.

The position that a solution should include a cap instead of full removal is nothing new and was already shot down by the EPA in 2017.

In court documents, emails from the head of Waste Management's Environmental Legacy Management Group to a colleague in 2011 said "the big plan is to sell this cap ... as part of the final remedy." The company admitted in court to paying and working with three groups which were quoted in media outlets as independent local-level voices pushing to cap the waste in place of removal.

The EPA has repeatedly rebuffed requests to reopen consideration of alternatives to full cleanup, saying that the companies "have failed to document that the selected remedy is not implementable or that the listed technical uncertainties do not have acceptable engineering solutions."

The consequences

After watching the river shift and flood for decades, even permanently overtaking the levees around the northern pit in 1973, many vocal residents and organizations fear that any cap will fail to protect them in the long term.

Jackie Medcalf, who leads a group called Texas Health & Environmental Alliance, grew up along the river. When she learned of its toxicity in an undergraduate hydrology class around the same time as Moss did, she and her doctors reevaluated the persistent, mysterious seizures she experienced as well as other health problems in her family. She has since been at the helm of the area's push for full remediation.

Once the EPA chose to pursue full-site cleanup in 2017, Medcalf said, "people thought, 'Oh great, it's gonna get taken care of, we can stop following this.' And then, when the construction started (on the southern pit), that was a massive achievement and a massive milestone. But there's still a battle going on here, the companies are still very much trying to get out of this."

Now that the agency has called off the negotiations over an independent design review, it has suggested it could conduct its own engineering review or gather technical information from other cleanup sites. EPA spokesman Joe Robledo told the Chronicle that the agency is currently reviewing the companies' concerns to "provide comments on their technical plans."

The agency expects the design will be finished near the end of 2024 and remedial action will take up to eight years to complete.

In response to a series of questions, both companies said they were invested in the process.

"International Paper is committed to protecting the environment and believes that remediation planning for the San Jacinto site should be rigorous, transparent and science-based, and should lead to design and engineering standards that will protect the river and the community," Amy Simpson, a spokesperson for the company, said in an email.

McGinnes Industrial, the Waste Management subsidiary, said in a statement that remediation of the northern pit "presents a significant technical challenge because it includes submerged areas."

Trucks on I-10 drive past the northern part of the San Jacinto Waste Pits Superfund site, a former paper mill dumping site.

The company's statement went on to say that "the responsible parties submitted a proposed design to EPA which involves removing most of the impacted soils from the northern impoundment while leaving a small amount of capped material in the deeply submerged northwest corner of the property due to safety and engineering concerns," and that it remains "actively engaged with EPA."

To area residents, the "deeply submerged" contamination is the most concerning.

When a member of Precinct 3's outreach staff said at the August meeting of another neighborhood group, the Channel-view Health & Improvement Coalition, that on the surface the river looked idyllic and perfect for fishing, a longtime resident jumped in from the audience.

"You'll glow in the dark if you eat anything out of that river," Cyndi Benson said. While she is not an activist, Benson has lived in the area since 1962 and remembers "when the river was nice, when you could ski, you could swim." She knows how hopeless many area residents feel about their river from chatter at the bars in town.

"Who in their right mind would put dioxin next to a waterway and think that you can cap it and it's not gonna leak at some point? That's just stupidity. I'm not stupid," Benson said. "You take it out to the desert, put it anywhere where there's not a waterway, because the waterway carries it everywhere."